

Ringwood Mines/Landfill

New Jersey

EPA ID#: NJD980529739

EPA REGION 2

Congressional District(s): 05

Passaic
Ringwood Borough

NPL LISTING HISTORY

Proposed Date: 12/30/1982

Final Date: 9/1/1983

Deletion Date: 11/2/1994

Site Description

Magnetite mines were operated on the 500-acre Ringwood Mines/Landfill Site (Site) as early as the 1700s, and wastes have been disposed of at the Site since the 1960s. The Site is about 1/2 mile wide and 1 1/2 miles long and consists of rugged forested areas, open areas overgrown with vegetation, abandoned mine shafts and surface pits, an inactive landfill, an industrial refuse disposal area, small surficial dumps, a municipal recycling center, the Ringwood Borough garage, and about 50 private homes. Two abandoned mines, Peter's Mine and Cannon Mine, have been used for the disposal of garbage and other wastes over the years. Peter's Mine also contains paint sludges, solvents, and scrap metal. Several drums have been observed in Cannon Mine. Mining ended at the Site in the early 1900s, and the history of the Site is unclear from then until the late 1930s. The Site was purchased by the U.S. Government prior to 1940 and later was sold to a succession of owners. From 1965 until 1974, the Site was owned by Ringwood Realty, a subsidiary of the Ford Motor Company. During this period, Ford Motor Company wastes, including car parts and paint sludges, were disposed of on the ground surface and in abandoned mine pits. In 1970, Ringwood Realty donated 290 acres in the southern portion of the Site to the Ringwood Solid Waste Management Authority, which began operating a permitted municipal disposal area in 1972. The landfill was closed by the State in 1976. Ground water beneath the Site discharges to surface streams and the Wanaque Reservoir, located 1/2 mile southeast of the nearest on-site sludge disposal areas. The area around the Site is primarily residential, with about 50 residences located on or near disposal areas. The approximately 50 residences in the immediate vicinity of the Site receive water from a municipal water supply. Approximately 13,000 people live in Ringwood Borough. The Wanaque Reservoir provides drinking water to about 2,000,000 people.

Site Responsibility: This Site is being addressed through Federal and potentially responsible parties' actions.

Threat and Contaminants

Groundwater sampling has indicated some sporadic levels of volatile organic compounds (VOCs) and metals above drinking water standards. Surface water sampling in streams at the Site has showed no significant contamination. Threats posed from exposure to paint sludge and associated soils is being addressed through removal of this material. In addition, fencing has been installed around landfill areas to restrict access to remaining wastes. Paint sludge contains a number of contaminants including, but not limited to, lead and VOCs.

Cleanup Approach

The Site was addressed in two stages: immediate actions and a long-term remedial phase focusing on monitoring the entire Site.

Response Action Status

Immediate Actions: From 1987 to 1988, 7,000 cubic yards of paint sludge and associated soils were removed from four on-site areas and disposed of off-site. In early 1990, 60 drums containing wastes were discovered. The drums were removed and disposed of off-site. Additional solidified paint sludge (approximately five cubic yards) discovered in April of 1995 was disposed of off-site. In 1997, fifty (50) cubic yards of paint sludge was discovered at the Site. This paint sludge was removed during December 1997 and January 1998. The excavated paint sludge was containerized and transported for disposal at an appropriate off-site facility. In April 2004, significant amounts of paint sludge were determined to be present at the site. This has prompted additional paint sludge and drum removal activities, which were initiated in December 2004 and are ongoing. Additional removal activities were performed in 2010 to remove soil contamination in

the paint sludge disposal areas which may be related to paint sludge. In addition, a thorough resurveying of the site was performed to assure all areas of paint sludge are addressed in this action.

In October 2005 the New Jersey Department of Environmental Protection (NJDEP) accepted responsibility for investigation of residential properties at the site. In 2011, EPA was notified that soil sampling conducted by the NJDEP identified the presence of elevated levels of lead in soil on some residential properties at the site. Due to this discovery, EPA initiated removal activities to provide for the identification and cleanup of impacted soils on residential properties at the site. To date, over 1400 cubic yards of lead impacted soil and 220 cubic yards soil containing paint sludge have been removed from the residential properties during this ongoing removal action.

Entire Site: Paint sludge and other industrial waste at the site have been addressed through a series of removal actions, as described above. Long-term ground water and surface water monitoring efforts began in 1989 and are ongoing. Surface water at the Site has been sampled on a number of occasions in the 1990s, and in 2000, 2004, 2005, 2011 and 2012. Results of surface water sampling indicate that surface water has not been impacted by site-related contaminants. Groundwater sampling has shown limited and sporadically elevated levels of some contaminants, including benzene, arsenic and lead. Additional groundwater sampling will be performed in conjunction with ongoing activities related to the investigation of remaining contamination at the site. Fencing has been installed around the remaining landfill areas to mitigate the potential for exposure to site-related contaminants while investigation of the site continues.

Site Facts: EPA issued an Administrative Order to Ford International Services, Inc. (Ford) to clean up soil contamination and to eliminate health and environmental risks associated with the Site. Ford completed this clean-up under the terms of this order and EPA deleted the Site from the NPL on November 2, 1994. However, since paint sludge has continued to be discovered since the initial removal of this material and removal of the Site from the NPL, Ford has agreed to perform comprehensive investigations including a resurvey of the Site, removal of remaining surficial paint sludge, and groundwater and surface water sampling. This phase of work was initiated in 2004 and is ongoing. An Administrative Order was issued by EPA to Ford in September 2005 which requires a comprehensive investigation of the site. In addition, an Administrative Order was issued to Ford in May 2010 which requires Ford to evaluate cleanup alternatives for the remaining landfill areas and groundwater. All work is being overseen by EPA. In September 2006, EPA restored the Site to the NPL.

Cleanup Progress

The potential for exposure to hazardous materials from the Ringwood Mines/Landfill Site has been partially addressed by removing over 50,000 tons of paint sludge and associated soils, and 113 drums of waste materials from non-residential areas and disposing of this material off site, as well as the removal of over 1400 cubic yards of impacted soil from residential properties. In addition, the installation of fencing around the remaining landfill areas should mitigate the potential for exposure while site cleanup continues. The Environmental Monitoring Program to sample groundwater at the Site was concluded by Ford in 1995. The data showed that elevated levels of lead and arsenic existed in four (4) on-site monitoring wells. Ford resampled those wells using the Low-Flow Sampling and Purging Technique in August 1999 and the data from this event showed an elevated arsenic level in one of the wells. In order to monitor this situation, Ford resampled all four wells and sampled three (3) surface water locations in April 2000. Results of this round of sampling showed that lead and arsenic levels have decreased and were below health-based levels, except for a slightly elevated level of arsenic in one well. In addition, no contaminants were found in the surface water above health-based levels. Since the discovery of additional paint sludge at the site in 2004, groundwater sampling events were performed in 2004, 2006, 2007, 2008, 2009, 2010, 2011 and 2012 which included the sampling of all viable wells at the Site. Results of these sampling events indicate the sporadic presence of several contaminants including lead, arsenic and benzene at levels above drinking water standards. Results of surface water sampling continue to indicate that surface water does not contain elevated levels of contaminants.

Site Repositories

Ringwood Library, 30 Cannici Drive, Ringwood, New Jersey 07456

USEPA Region 2 Office, 290 Broadway, 18th Floor, New York, New York 10007-1866